

### REMARKS

A restriction requirement has been made. Applicants hereby affirm the provisional election of Claims 1-33, with traverse.

Applicants have cancelled Claims 1-41 and inserted new Claims 42-73 directed to the invention of elected Group I but redrafted to overcome the rejections under 35 U.S.C. 112, 35 U.S.C. 102(b) and 35 U.S.C. 103(a).

Claims 1, 4, 9, 11-14 and 31 have been rejected under 35 U.S.C. 102(b) as anticipated by Zuellig et al. Applicants' newly inserted independent Claims 42, 53 and 63 each require a fluid distribution manifold with three portions: a first, source selection portion with source selection means, a second, fluid distribution portion with fluid distribution channels each of which is separately connected to each of the reaction vessels in a different one of the sets of reaction vessels and an intermediate valve portion interposed between the source selection portion and the fluid distribution portion of the manifold, the valve portion of the manifold having independently actuatable valves, which, when actuated, connect the selected source with the associated distribution channel.

Zuellig teaches a portion 130 with two sets of source selection valves 132, 134. Each valve set 132, 134 is associated with a different manifold 110. Each valve 132, 134 in each set feeds a different one of two common lines 50, 60 in the associated manifold 110, one line for gas and one line for liquid. No independently actuatable valves are provided between the source selection valves 132, 134 and the lines 50, 60 in the manifolds 110.

Thus, every vessel 30 associated with each manifold 110 simultaneously receives either liquid or gas from valve 132 or 134. No independently actuatable valves, separate

from the source selection valves, are associated with different ones of the distribution channels in the distribution portion. Accordingly, Zuellig clearly does not anticipate applicants' new claims, which explicitly require independently actuatable valves, interposed between the source selection portion and the fluid distribution channels in the fluid distribution portion, such that the selected source may be connected to each of the vessels connected to the distribution channel associated with the actuated valve.

Claims 1, 2, 4, 5 and 31-33 have been rejected under 35 U.S.C. 102(b) as being anticipated by Moore. Moore teaches a reactor with open bottom reaction vessels. Sets of vertically aligned reaction vessels are connected together, top to bottom. Connecting the vessels together in this manner permits reagents can be simultaneously introduced into or recirculated through each of the vessels in an interconnected group. Because the reaction vessels in each group in Moore are connected together, Moore does not teach a fluid distribution manifold portion with means for separately connecting each of the fluid distribution channels to each of the reaction vessels in a different one of the reaction vessel sets, respectively.

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Moore's distribution lines 52, 58 and 64 are only connected to the vessel at the top or bottom of the group. The lines are thus simultaneously (not separately) connected to all of the vessels in the group. Therefore, Moore does not anticipate applicants' new claims 42, 53 and 63.

Claims 18 and 22 are rejected under 35 U.S.C. 102(b) as anticipated by Mohan. Mohan teaches a fluid delivery block 20 and a valve block 30. Block 30 includes an array of valve inserts 51 and the mechanism to operate the valves.

Mohan's fluid delivery manifold 20 delivers fluid to the reactor vessels 12 but does not have any valves associated with it. Valve block 30 has valves associated with it but, as clearly seen in Figures 4 and 5, the control stems of each of the valve inserts are ganged together. Thus, all of the valves must operate simultaneously. The valves cannot be independently actuated to feed selected vessels sets. Since there are no independently actuatable valves connected to associated distribution channels, as required by new Claims 42, 53 and 63, applicants' new claims are clearly not anticipated by Mohan.

Claims 1-6, 9, 14, 15, 18, 19, 22-26, 31-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Lebl. However, Lebl lacks a manifold with a source selection portion including a means for selecting a fluid source. It also lacks independently actuated valves interposed between the source selection portion and the fluid distribution channels in the fluid distribution portion. In Lebl, each of the valve rods 228 are connected to a single mechanical linkage 212 and therefore must open or close simultaneously as the linkage is moved. Accordingly, these claims are not anticipated by Lebl.

Claims 1-6 and 31-33 are rejected under 35 U.S.C. 102(b) as anticipated by, or in the alternative, under 35 U.S.C. 103(a) as obvious over Moore. However, as set forth above, Moore lacks means for separately connecting each distribution channel to each vessel in the set. Accordingly, Moore does not anticipate applicants' new independent claims. Further, there is no teaching, suggestion or motivation to alter the structure of Moore to provide separate vessel connection with each distribution channel, nor could that be accomplished without changing the vessel structure and format utilized by Moore.

Claims 28 and 29 directed to the explosion proof shield have been rejected under 35 U.S.C. 103(a) as obvious over Lebl or Cody. Claims 28 and 29 have been cancelled. However, new claims 49 and 50, 59 and 60, and 70 and 71 have been inserted to cover this subject matter. Claims 49 and 50, 59 and 60, and 70 and 71 are respectively dependent upon claims 42, 53, and 62 and believed to distinguish over Lebl for the reasons stated above. Cody does not meet the limitations of these independent claims and hence, whether considered individually or in combination with Lebl, does not render applicants' claims unpatentable.

Claims 17 and 30 directed to the temperature sensing means have been rejected under 35 U.S.C. 103(a) as unpatentable over Zuellig or Moore or Mohan or Lebl, in view of Antonenko. Claims 17 and 20 have been cancelled but new claims 52, 62 and 73 have been inserted relating to this subject matter. Claims 52, 62 and 73 are dependent upon new claims 42, 53 and 63 respectively and are believed to distinguish over Zuellig, Moore, Mohan and Lebl for the reasons stated above. Antonenko does not teach the limitations of claims 42, 53 and 62 lacking in the primary references and therefore whether considered individually or in conjunction with Zuellig, Moore, Mohan or Lebl, does not anticipate new claims 52, 62 or 73.

Claims 7, 8 and 20 to the five-way source selection valve have been rejected under 35 U.S.C. 103(a) as unpatentable over Zuellig, Moore, Mohan, Lebl in view of Koike. Claims 7, 8 and 20 have been cancelled but new claims 45, 55 and 66 to that subject matter have been inserted. Claims 45, 55 and 66 are dependent on claims 42, 53 and 63, respectively and are believed to distinguish over Zuellig, Moore, Mohan and Lebl for the reasons stated above. Koike does not teach or render obvious the elements of

Claims 42, 53 and 63 and hence whether considered individually or in combination with Zuellig, Moore, Mohan or Lebl, does not render claims 42, 53 or 63 unpatentable.

Claims 10 and 27 to the o-ring sealing means have been rejected under 35 U.S.C. 103(a) as being unpatentable over Zuellig, Moore, Mohan or Lebl in view of Antonenko. Claims 10 and 27 have been cancelled and new claims 47, 57 and 68 relating to this subject matter have been inserted. Claims 47, 57 and 68 are respectively dependent upon new claims 42, 53 and 63 and are believed to distinguish over Zuellig, Moore, Mohan and Lebl for the reasons stated above. Antonenko does not teach or render obvious the elements of new claims 42, 53 and 63 lacking in the primary references and hence whether considered individually or in combination with Zuellig, Moore, Mohan or Lebl, does not render claims 47, 57 or 68 unpatentable.

Claim 21 directed to the pressure relief valve has been rejected under 35 U.S.C. 103(a) as unpatentable over Mohan or Lebl in view of Kilcoin, Harness or Gallup. Claim 21 has been cancelled and new claims 48, 58 and 69 relating to this subject matter have been inserted. Claims 48, 58 and 69 are respectively are dependent on claims 42, 53 and 63 and are believed to distinguish over Mohan and Lebl for the reasons stated above. Since Kilcoin, Harness and Gallup, whether considered individually or in combination with Mohan or Lebl do not teach, suggest or render obvious the limitations of claims 42, 53 or 63, and therefore claims 48, 58 and 69 are believed to recite patentable subject matter.

Claim 16 directed to different height valve stems has been rejected under 35 U.S.C. 103(a) as being unpatentable over Zuellig, Moore or Lebl. Claim 16 has been cancelled and new claims 51, 61 and 72 have been inserted. Claims 51, 61 and 72 are

dependent upon claims 42, 53 and 63, respectively and believed to distinguish over Zuellig, Moore and Lebl for the reasons stated above. Further, not a single reference is cited that teaches different height valve stems.

Claims 43 through 52 are dependent upon Claim 42 and distinguish over the references for the same reasons as Claim 42.

Claims 54 through 62 are dependent upon Claim 53 and distinguish over the references for the same reasons as Claim 53.

Claims 64 through 73 are dependant upon claim 63 and distinguish over the cited references for the same reasons as claim 63.

Respectfully submitted,

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